

Conclusion: TAD measurement in A4C view by 2D-TTE was highly feasible, reproducible and accurately reflected TA size, even if it was systematically underestimating its maximal diameter. Based on measurements in healthy volunteers, we suggest to consider tricuspid annuloplasty during left-heart valve surgery when TA is more than 2.3cm/m² or 4.2cm in A4C.

0436

Prevalence and clinical impact of QRS duration in patients with low-flow/low-gradient aortic stenosis due to left ventricular systolic dysfunction

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Aims: To evaluate the prognostic impact of QRS width in patients with low-flow/low-gradient aortic stenosis (LF/LGAS).

Methods and Results: Among 88 consecutive patients referred to our institution for LF/LGAS from September 1994 to March 2007, baseline demographic, clinical, echocardiographic and electrocardiographic data were collected. This population was divided in two groups according to baseline QRS duration (cutoff: QRS \geq 130ms). Follow-up data, including electrocardiographic evolution and overall mortality were analyzed. The mean follow-up duration was 3.1 (2.2-6.2) years. In the whole group, 67 patients underwent surgical aortic valve replacement. Forty-nine patients (56%) had a QRS duration \geq 130ms. Among operated patients, there was no significant change in QRS duration between baseline and latest follow-up (126 \pm 26 vs. 131 \pm 25ms; p=0.82). In addition, wider QRS was a strong independent predictor of overall mortality [HR=2.20; CI, 1.15–4.24; p=0.027].

Conclusion: Significant intra-ventricular conduction disturbances are common in patients with LF/LGAS and do not recover after aortic valve replacement. QRS duration is strongly associated with mortality in this selected population.

0520

Percutaneous mitral commissurotomy in patients over 50 years old: immediate and long-term results

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Objective: Describe the immediate and final outcome of percutaneous mitral balloon commissurotomy (PMC) with Inoue balloon in patients over 50 years old and associate complications with age and Wilkins score.

Material and methods: A retrospective and analytic study was performed with a data base of 480 patients. We included all the patients proceeding in our department from January 1998 to December 2012. 75 were $>$ or = 50-years old (group1). Immediate and late outcomes in this group (group 1) were compared with those in the patients aged $<$ 50-years (group 2).

Results: Baseline hemodynamic parameters were comparable in the two groups. The Wilkins score was $>$ 8 in 11 patients. We found a Mitral Valvular Area (MVA) before the PMC proceeding of 0.99cm² \pm 0.2 and 1.87cm² \pm 0.38 post PMC (P $<$ 0.001), with pre procedure transmitral gradient of 12.7 \pm 4.05mm Hg and of 4.4 \pm 2.3mm Hg post (P $<$ 0.001). Similar significant improvements were seen in group 2. In 72 patients (96%) the immediate proceeding was considered successful. The hemodynamic result was good in 85.3% of group 1 patients. Tamponade occurred in one patient. Mitral regurgitation grade I or II developed in 8 patients and remained stable in 19 patients. These complication rates were comparable to those seen in group 2. A clinical and echocardiographic follow-up was performed in 68 patients (93%). In the group 1, a good result was maintained in 60% of patients after 75.8 \pm 40 months of follow-up. Although restenosis was observed in 28% of patients, functional amelioration was obtained in most of cases. Survival free of mitral valve intervention or

heart failure \geq NYHA III was significantly better for patients with good immediate result.

Conclusions: PMC is safe and efficacious in elderly patients with symptomatic mitral stenosis. Long-term results are good and related mainly to the quality of the procedure.

0546

Aortic paravalvular regurgitation after transcatheter valve implantation is associated with worse prognosis

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Background: Aortic stenosis (AS) is increasing in incidence with the aging of the population. Transcatheter Aortic Valve Implantation (TAVI) provides a therapeutic option for patients with severe AS who are high risk surgical candidates. A large proportion of patients undergoing TAVI have at least mild aortic paravalvular regurgitation (APR) following the procedure.

Objective: The purpose of this study was to determine the clinical and prognostic significance of paravalvular regurgitation early after TAVI.

Methods: Hundred and five patients who underwent TAVI at our center from 9.2008 to 5.2012 were studied retrospectively. Echocardiography before and following the procedure but prior to discharge were reviewed. Aortic and mitral regurgitations were assessed using semi quantitative methods.

Results: Among 105 patients who underwent TAVI, twenty four (23%) had significant (moderate and more) APR and eighty one (77%) had non significant (less than moderate) APR. There was not significant difference in the baseline characteristics of the two groups (age, sex, left ventricular ejection fraction, aortic valve area, aortic ventricular gradient, ischemic heart disease, pre-procedural aortic regurgitation). Mean follow up was up to 19 months. The mortality rate was higher in the group with significant PAR as compared with the group without APR (29% versus 11% p<0.009). The frequency of develop block was more frequent in this group (47% versus 30%, p<0.205). Worsening of Mitral regurgitation was more frequent in the significant APR group (71% versus 17%, P<0.001) as worsening of pulmonary hypertension (21% versus 4%, P<0.001).

Conclusions: Significant paravalvular aortic regurgitation after TAVI causes worsening of mitral regurgitation and pulmonary hypertension and seems associated with higher risk of pacemaker implantation and mortality. Paravalvular aortic regurgitation has clinical significance beyond the often minimal hemodynamic effects after TAVI.

0549

Complications of repeat percutaneous mitral valvuloplasty

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Background: Percutaneous mitral valvuloplasty (PMV) has emerged as the procedure of choice in treatment of mitral stenosis and has proved effectiveness in cases of mitral restenosis after surgical commissurotomy. Compared with surgery, PMV is associated with shorter hospital stays, reduced patient discomfort, and significantly lower costs. However, it is unknown whether patients who developed symptomatic mitral restenosis after PMV may benefit from repeat PMV (re-PMV) with safety.

Objectives: This study was designed to evaluate the occurrence rate and the predictive factors for severe complications following re-PMV.

Methods: Retrospective study from a series of 40 procedures of re-PMV with the Inoue balloon at 8 \pm 4 years after prior procedure, performed between